

(Musical notation for the first system of the score)

15 nt

Substrate RNA (46 nt) (SEQ ID NO:161)

5' AAGCUUGCAUGCCUGCAGGUCGACUCUAGAGGAUCCCC 3'

3' CGTACGGACGTCCAGCTGAGATCTCCTAGG 5'

30-0 (SEQ ID NO:20)

FIG. 13A

-35 -10 RBS
TTGACAAATTAATCATCGGCTCGTATAATGTGTGGAATTGTGAGCGGATAACAAATTCACACAGGAACAGCG
 MetAsnSer...
ATGAATTCGAGCTCGGTACCCGGGATCCTCTAGAGTCGACCTGCAGGCATGCCAAGCTTGGCACTGGCC
 EcoRI KpnI BamHI SalI SphI PstI HindIII
 SstI SmaI XbaI

Diagram of the pTQ118 plasmid map. The plasmid is circular and 4563 b.p. in size. It contains several key elements: the *rrnBt* gene, the *lacZ* gene, the *ptac* promoter, the *Amp^r* resistance gene, and the *lac|Q* regulatory element. Arrows indicate the direction of transcription for each gene.

FIG. 14A

RBS: Ribosome binding site
ptac: Synthetic tac promoter
lac I^Q: Lac repressor gene
lacZ: Beta-galactosidase alpha fragment
rrnBt: E. coli rrnB transcription terminator

FIG. 14C

[illegible]

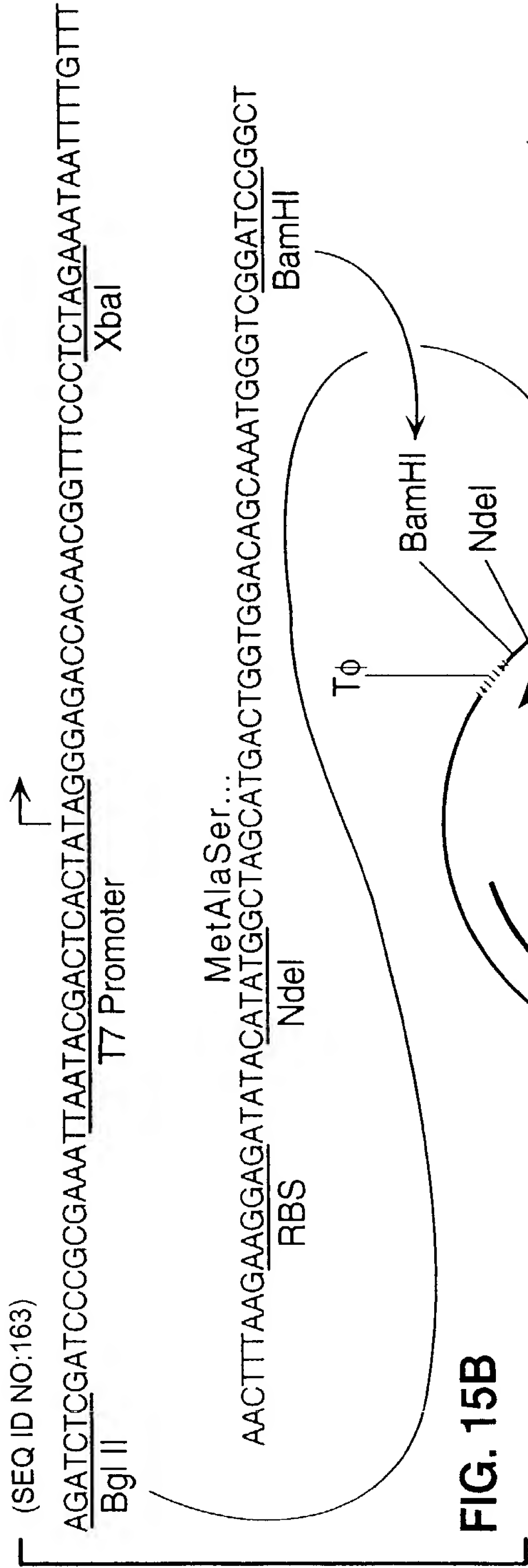


FIG. 15B

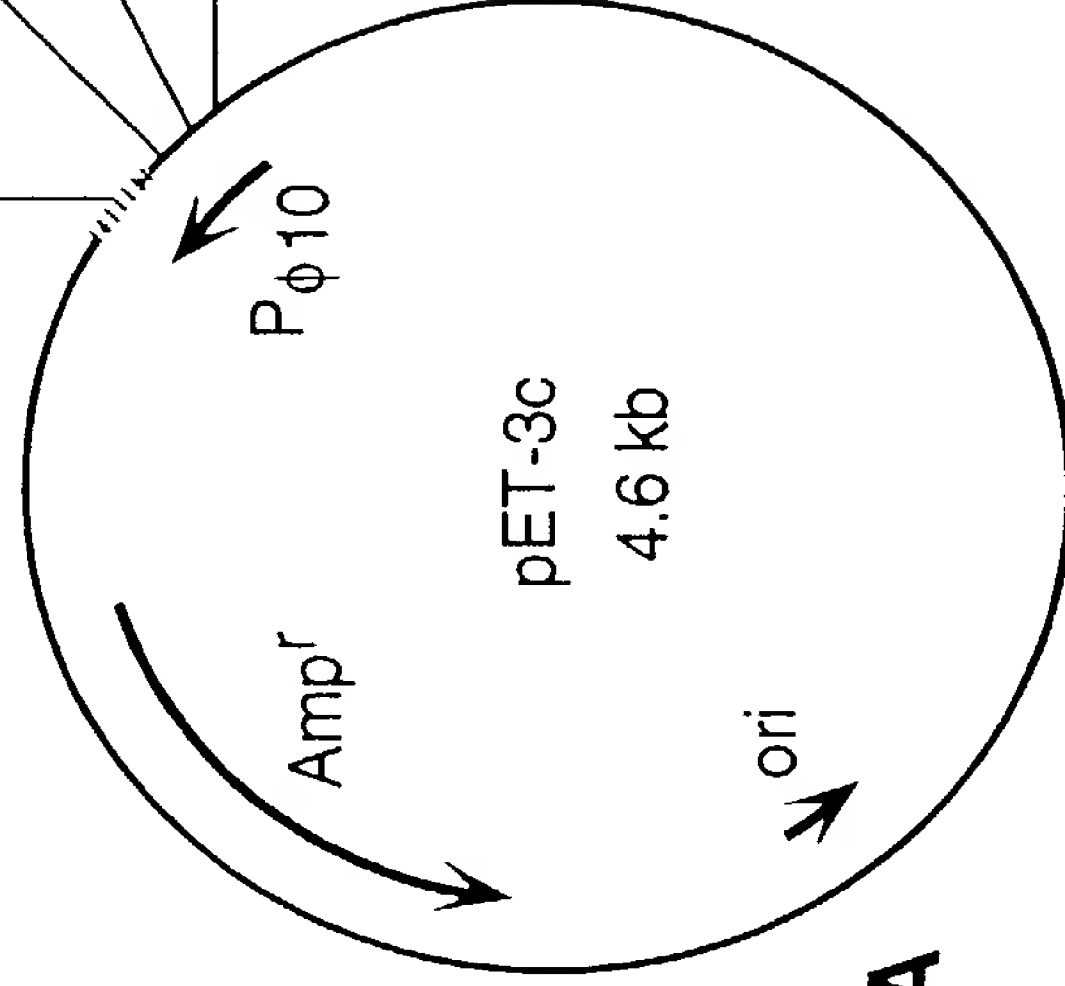


FIG. 15A



5' arm
(SEQ ID NO:15) **TAATACGACTCACTATAGGG**AGACCGGAATTCGAGCTCGC
Cleavage Sites
a b
3' arm
(SEQ ID NO:17) **GATTGGAATTCGAGCTCACTATAGAA**CTTAAGCTCGAGCGG
Primer
5' arm
3' arm

FIG. 16E

$$\begin{aligned} & \left(\begin{array}{c} 1 \\ 2 \\ 3 \\ 4 \\ 5 \\ 6 \\ 7 \\ 8 \\ 9 \\ 10 \\ 11 \\ 12 \end{array} \right) \left(\begin{array}{c} 1 \\ 2 \\ 3 \\ 4 \\ 5 \\ 6 \\ 7 \\ 8 \\ 9 \\ 10 \\ 11 \\ 12 \end{array} \right) \left(\begin{array}{c} 1 \\ 2 \\ 3 \\ 4 \\ 5 \\ 6 \\ 7 \\ 8 \\ 9 \\ 10 \\ 11 \\ 12 \end{array} \right) \left(\begin{array}{c} 1 \\ 2 \\ 3 \\ 4 \\ 5 \\ 6 \\ 7 \\ 8 \\ 9 \\ 10 \\ 11 \\ 12 \end{array} \right) \left(\begin{array}{c} 1 \\ 2 \\ 3 \\ 4 \\ 5 \\ 6 \\ 7 \\ 8 \\ 9 \\ 10 \\ 11 \\ 12 \end{array} \right) \\ & \left(\begin{array}{c} 1 \\ 2 \\ 3 \\ 4 \\ 5 \\ 6 \\ 7 \\ 8 \\ 9 \\ 10 \\ 11 \\ 12 \end{array} \right) \left(\begin{array}{c} 1 \\ 2 \\ 3 \\ 4 \\ 5 \\ 6 \\ 7 \\ 8 \\ 9 \\ 10 \\ 11 \\ 12 \end{array} \right) \left(\begin{array}{c} 1 \\ 2 \\ 3 \\ 4 \\ 5 \\ 6 \\ 7 \\ 8 \\ 9 \\ 10 \\ 11 \\ 12 \end{array} \right) \left(\begin{array}{c} 1 \\ 2 \\ 3 \\ 4 \\ 5 \\ 6 \\ 7 \\ 8 \\ 9 \\ 10 \\ 11 \\ 12 \end{array} \right) \left(\begin{array}{c} 1 \\ 2 \\ 3 \\ 4 \\ 5 \\ 6 \\ 7 \\ 8 \\ 9 \\ 10 \\ 11 \\ 12 \end{array} \right) \end{aligned}$$

FIG. 20A

5' GACGAACAAGCGAGACAGCG 3'

FIG. 20B

FIG. 20C

FIG. 20D

[illegible]

